

REMARKS

This Amendment responds to the Office Action dated July 10, 2003 in which the Examiner rejected claims 11, 13 and 24 under 35 U.S.C. §103, stated that claims 1-10 are allowed and objected to claims 12 and 14-23 as being dependent upon a rejected base claim but would be allowable if rewritten in independent form.

As indicated above, withdrawn claims 25-40 have been canceled without prejudice.

Claim 11 claims an anti-reflection film containing a low-refractive-index layer, having a refractive index of 1.30 to 1.55. The film comprises from 50 to 95% by weight of short fibrous inorganic fine particles, and from 5 to 50% by weight of a polymer. There are micro voids formed among the short fibrous inorganic fine particles.

Through the structure of the claimed invention comprising short fibrous inorganic fine particles, as claimed in claim 11, the claimed invention provides an anti-reflection film having a low-refractive-index layer and causing no surface defects or pointing defects. The prior art does not show, teach or suggest the invention as claimed in claim 11.

Claims 11, 13 and 24 were rejected under 35 U.S.C. §103 as being unpatentable over *Nakamura et al.* (EP 0778476).

Applicants respectfully traverse the Examiner's rejection of the claims under 35 U.S.C. §103. The claims have been reviewed in light of the Office Action, and for reasons which will be set forth below, Applicants respectfully request the Examiner withdraws the rejection to the claims and allows the claims to issue.

Nakamura et al. appears to disclose a representative example of an anti-reflection film which is shown in Fig. 1. A low-refractive index layer 11 is formed on a transparent film (support) 13. The low refractive index layer 11 comprises fluororesin particles and micro voids formed between the particles. In the low refractive index layer 11, at least two fluororesin particles are superposed in the thickness direction, whereby the micro voids can be formed between the particles. Thus, the micro voids are generally arranged uniformly in the low refractive index layer 11. (page 3, lines 52-56) Air on the low-refractive layer 11 has a refractive index of 1.00, while the fluororesin particle generally has a refractive index of 1.25 to 1.45. The low-refractive layer 11 generally shows an intermediate value between a refractive index of air and that of the fluororesin particle. Thus, the refractive index of the low refractive index layer 11 can be lowered by increasing the volume fraction of the micro voids through using fluororesin fine particles and forming micro voids between the fine particles. The mean particle size of the fluororesin particles generally is in the range of 5 to 200 m, preferably 5 to 50 nm, and a thickness of the low-refractive layer generally is in the range of 50 to 400 nm, preferably 50 to 200 nm. (page 4, lines 7-13)

Thus, *Nakamura et al.* merely discloses an anti-reflection film comprising a fluorine-containing polymer or fluororesin. Nothing in *Nakamura et al.* shows, teaches or suggests an anti-reflection film comprising short fibrous inorganic fine particles as claimed in claim 11. Rather, as shown on pages 5-8 of *Nakamura et al.*, the fluorine-containing polymer disclosed in *Nakamura et al.* cannot be a short fibrous inorganic fine particle.

Additionally, *Nakamura et al.* merely discloses in Figure 1, that the particles are spherical. However, as disclosed in the specification in Table 3, spherical particles as shown in Comparative Example 2-1 and Comparative Example 2-2 (see specification page 167 lines 8-9 versus page 61 lines 12-13 and page 170 line 22) still contained point defects versus the Examples 2-1 and 2-2 which contain the short fibrous inorganic fine particles and contain no point defects. Thus, as shown in Figure 2 of the specification and explained through pages 161-172 of the specification, the shape of the inorganic fine particles directly effects the point defects.

Since nothing in *Nakamura et al.* shows, teaches or suggests short fibrous inorganic fine particles as claimed in claim 11, Applicants respectfully request the Examiner withdraws the rejection to claim 11 under 35 U.S.C. §103.

Claims 13 and 24 depend from claim 11 and recite additional features. It is respectfully submitted that claims 13 and 24 would not have been obvious within the meaning of 35 U.S.C. §103 over *Nakamura et al.* at least for the reasons as set forth above. Therefore, Applicants respectfully request the Examiner withdraws the rejection to claims 13 and 24 under 35 U.S.C. §103.

Since objected to claims 12 and 14-23 depend from an allowable claim, it is respectfully requested that the Examiner withdraws the objection thereto.

The prior art of record, which is not relied upon, is acknowledged. References taken singularly or in combination do not anticipate or make obvious the claimed invention.

Thus it now appears that the application is in condition for reconsideration and allowance. Reconsideration and allowance at an early date are respectfully requested.

If for any reason Examiner feels that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by telephone, the applicants' undersigned attorney at the indicated telephone number to arrange for an interview to expedite the disposition of this case.

In the event that this paper is not timely filed within the currently set shortened statutory period, applicants respectfully petition for an appropriate extension of time. The fees for such extension of time may be charged to our Deposit Account No. 02-4800.

In the event that any additional fees are due with this paper, please charge our Deposit Account No. 02-4800.

Respectfully submitted,

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